UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,506	12/12/2006	Stephane Doat	0508-1169	8379

466 7590 04/14/2010
YOUNG & THOMPSON
209 Madison Street
Suite 500
Alexandria, VA 22314

EXAMINER	
PADEN, CAROLYN A	

ART UNIT	PAPER NUMBER
1781	

NOTIFICATION DATE	DELIVERY MODE
04/14/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

Office Action Summary	Application No.	Applicant(s)	
	10/589,506	DOAT ET AL.	
	Examiner	Art Unit	
	Carolyn A. Paden	1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *24-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *24-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1-30-07; 8-15-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claims 25-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in the claims as to what steps are included in the process of the claims because the claims are in the passive voice. An amendment to the claims converting them to the active voice would overcome the rejection.

Claims 27-28 use T2 temperatures which are outside the range of what is indicated in claim 24 and so the claims do not further limit claim 24. An amendment to the claim correcting this issued would overcome the rejection.

Claims 30-36 use an optional stage and it is unclear if this stage is intended to be included or not. An amendment to the claim clarifying this issue would overcome the rejection.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals

and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 26-37 and 41-42 recites the broad recitation of temperature, and the claim also recites the preferable range which is the narrower statement of the range/limitation.

Claim 38 includes a particular agent and a preferable agent. An amendment to the claims selecting on agent group or the other would overcome the rejection.

Claim 39 does not include any stanol esters so it is not seen that stanol esters form a limitation in the claim. An amendment to the claim clarifying this issue would overcome the rejection.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 24-26, 29-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doat (6,627,245) in view of Boyer (EP 1212945).

Doat discloses adding phytosterols or phytostanols to milk or milk-like foods to improve the nutritional properties of the food (column 1, lines 20-35, column 2, line 67 and examples). A suspension of phytosterols is injected into a liquid food (column 5, lines 13-15) before homogenization (column 5, lines 57-59). Homogenization is stated to occur at 50-500 bars and at 85C-130C for 30 seconds to 8 minutes (column 6, lines 11-17). No emulsifier is included in the process. After homogenization, the product is pasteurized for a time/temperature to reduce the microbe content in the food and improve the texture of the product (paragraph bridging columns 5-6). In example 1, skimmed yoghurt is made with 0.5% sitosterol. The sitosterol mixture is injected into milk and the product is homogenized at 75C, pasteurized at 95C and then cooled to 45C. The claims appear to differ from Doat in the recitation of the type of phytosterol used in the

process and in the melting temperature of the phytosterol. Boyer teaches fortifying dairy products with phytostanol ester (abstract). Here the phytosterol ester is melted at 140 F (60 C) and then added to the milk before homogenization (paragraph 0020). It is known in the art from a quick look at the physical properties of phytosterol that phytosterols melt at higher temperatures than 60C. It would have been obvious to one of ordinary skill in the art to substitute the phytosterol ester of Boyer for the phytosterol of Doat to fortify beverages with a source of phytosterol at a lower, energy conserving temperature.

It is appreciated that the fermentation temperatures of claim 30 are not mentioned but Example 1 teaches fermentation of the homogenized and pasteurized product (column 7, lines 33-40). The product is cooled to 45C so one would expect that fermentation to occur at this temperature.

Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doat (6,627,245).

Doat discloses adding phytosterols or phytostanols to milk or milk-like foods to improve the nutritional properties of the food (column 1, lines 20-35, column 2, line 67 and examples). A suspension of phytosterols is injected into a liquid food (column 5, lines 13-15) before homogenization

(column 5, lines 57-59). Homogenization is stated to occur at 50-500 bars and at 85C-130C for 30 seconds to 8 minutes (column 6, lines 11-17). No emulsifier is included in the process. After homogenization, the product is pasteurized for a time/temperature to reduce the microbe content in the food and improve the texture of the product (paragraph bridging columns 5-6). In example 1, skimmed yoghurt is made with 0.5% sitosterol. The sitosterol mixture is injected into milk and the product is homogenized at 75C, pasteurized at 95C and then cooled to 45C. The claims appear to differ from Doat in the recitation of melting the phytosterol. Doat forms a paste of phytosterol with Xanthan gum and then the paste is injected into the liquid milk. One of ordinary skill in the art might envision the loss of phytosterol grains from the phytosterol paste in the injection tube of Doat. It would have been obvious to one of ordinary skill in the art to melt the phytosterol of Doat to permit efficient and repeatable injection of measured amounts of phytosterol into the milk. The treatment temperature for phytosterol would have been obvious from the melting temperature of the phytosterol.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone

number is (571) 272-1403. The examiner can normally be reached on Monday to Friday from 7 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached by dialing 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Carolyn Paden/

Primary Examiner 1781

.